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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,249	03/19/2001	Jurgen Otterbach	Q63479	8372
7590 02/07/2006 SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 PENNSYLVANIA AVENUE, N.W. WASHINGTON, DC 20037-3213			EXAMINER PIZARRO, RICARDO M	
			ART UNIT 2662	PAPER NUMBER

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H/A

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/810,249	OTTERBACH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ricardo Pizarro	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-9 is/are allowed.
- 6) ☒ Claim(s) 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **FINAL ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 5,715,521 (Fukasawa ) in view of US patent No 6,301,288 (Molev-Shteiman)

Regarding claim 2, Fukasawa discloses a method for controlling synchronization signal power in a communication system comprising a Transmitting device ( First station in Fig 1, col 2 lines 40-45) for a multipoint-to-point network , in particular a synchronous multipoint- to-point CDMA network ( CDMA scheme, col 2 line 44) , containing a first unit ( Spreading unit 7 in Fig. 1) for generating a coded communications signal, in particular a CDMA--coded communications signal ( data signal B generated by Spreading Modulator 7 in Fig. 1, col 2 line 51)) , and a second unit ( Sync generator 10 in Fig. 1, col 2 line 54) for generating a coded synchronization signal characterized in that the second unit is suitable for generating a synchronization signal with a signal level which is lower than the signal level of the communications signal (synchronization Signal A produced by Synchronization signal generator 10 in Fig. 1 lower than other signal, col 2 lines 54-55) , characterized in that

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the synchronization signal is sent in the same transmission channel ( Communication channel 3 in Fig. 1, col 2 lines 43-44, col 3 lines 16-20).

Fukasawa did not specifically disclose a modulator being used to modulate the coded signal, in particular using alternating multiplication by +1 and -1, as in claim 2

However US patent No 6,301,288 ( Molev-Shteiman ) discloses a Method of chip interleaving in a CDMA system, comprising a transmitting device including a modulator ( Modulator 46 in Fig. 7 col 7 lines 4-10) that multiplies a coded signal by alternating +1 and -1 ( col 3 lines 41-47, col 4 lines 5, col 4 lines 9-11 and 21-27) as in claim 2.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to provide the multiplying means as disclosed by Molev-Shteiman to the system disclosed by Fukasawa in order to have a CDMA system that provides reduced interference caused by transmission of synchronization signals.

The motivation to do so is to obtain a CDMA system that enable synchronization signals to be transmitted at an optimum level.

### ***Response to Arguments***

2. Applicant's arguments filed on 10/13/05 have been fully considered but they are not persuasive.

Applicant argues that the secondary reference fails to disclose the application of multiplication by +1 and -1 to modulate a signal for synch purposes. And also that the references are not combinable.

Examiner disagrees, since Molev-Shteiman discloses application of multiplication by  $+1$  and  $-1$  to modulate the signal and indicates this multiplication is mostly for demodulation purposes, ( page 3 second paragraph of the response) . Applicant also argues that the references are not combinable.

Molev-Shteiman discloses on page 3 line 41-49 that at the transmitter, the message string and the pseudorandom binary code sequence usually are stored as strings of bits or chips respectively (0's and 1's). These are combined, in a process referred to above as "**modulation**", by applying an exclusive or (XOR) operation to bit-chip pairs in which the bit is selected from the message string and the chip is selected from the pseudorandom binary code sequence. The 0 chips of the resulting packet are mapped to +1's, the 1 chips are mapped to -1's, and the packet is imposed on a carrier wave for transmission to the receiver, a process also conventionally called "**modulation**".

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the combination of both references is with the motivation of having in a communications system the

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receiver **synchronized** with the transmitter for accurate reconstruction of a message string at the receiver.

***Allowable Subject Matter***

3. Claims 4 –9 are allowed

***Conclusion***

- 4 **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**Any response to this final action should be mailed to:**

**Box AF**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(571) 273-8300

.(for formal communications; please mark "EXPEDITED PROCEDURE", for informal or draft communications, please label "PROPOSED" or "DRAFT" )

Hand-delivered responses should be brought to 22- 20<sup>th</sup> Street S, Crystal Plaza Two, Lobby, Room 1B03, Arlington , VA 22202 ( Customer window).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ricardo Pizarro** whose telephone number is **(571) 272-3077**. The examiner can normally be reached on Monday-Thursday from 9:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Hassan Kizou** can be reached on (571) 272-3088.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

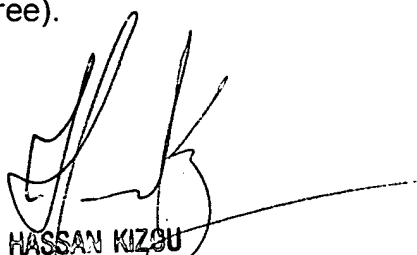
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For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 2, 2006  
Ricardo Pizarro



HASSAN KIZSU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800